IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: NINOMIYA, et al

Serial No.:   Not yet assigned

Filed: August 22, 2001

For: STORAGE SYSTEM

Group: 2812

Examiner: S. Whitmore

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents   August 22, 2001
Washington, D.C.   20231

Sir:

     The following amendments and remarks are respectfully

submitted prior to the Rule 53(b) Continuation Application

filed on even date.

IN THE SPECIFICATION

     Please insert before the first line of the specification

the following:

--   This is a continuation of application Serial No.

09/440,285, filed November 15, 1999, which is a continuation

of application Serial No. 09/013,039, filed January 26, 1998,

now U.S. Patent No. 6,012,119; which is a continuation of

Serial No. 08/819,625, filed March 17, 1997, now U.S. Patent

No. 5,819,054; which is a continuation of Serial No.

08/267,013, filed June 21, 1994, now abandoned. --

IN THE CLAIMS

Please cancel claims 1-20 without prejudice or disclaimer of the subject matter thereof.

Please add new claims 21-26 as follows:

--   21.   A storage system comprising:

a plurality of host adaptors connected to at least one host device, which form interfaces for the host device;

a plurality storage devices for storing therein data transferred from the host device;

a plurality of disk adaptors connected to said storage devices, which form interfaces for said storage devices;

a cache for temporarily storing therein data transferred between said plurality of host adaptors and said plurality of disk adaptors; and

two buses, connected to said plurality of host adaptors, said plurality of disk adaptors, and said cache, which transfer data among said plurality of host adaptors, said plurality of disk adaptors, and said cache, wherein said two buses operate as a pair of buses having a transfer ability larger than one of said two buses.

22.   A storage system according to claim 21, further comprising:

a memory for storing a status of which of said two buses is being used.

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23. A storage system according to claim 22, wherein said memory can be referred to by an external processor.

24. A storage system comprising:

a plurality of host adaptors connected to at least one host device, which form interfaces for the host device;

a plurality of storage devices for storing therein data transferred from the host device;

a plurality of disk adaptors connected to said storage devices, which form interfaces for said storage devices;

a plurality of caches for temporarily storing therein data transferred between said plurality of host adaptors and said plurality of disk adaptors; and

two buses, connected to said plurality of host adaptors, said plurality of disk adaptors, and said plurality of caches, which transfer data among said plurality of host adaptors, said plurality of disk adaptors, and said plurality of caches, wherein said two buses operate as a pair of buses having a transfer ability larger than one of said two buses.

25. A storage system according to claim 24, further comprising:

a memory for storing a status of which of said two buses is being used.

26. A storage system according to claim 25, wherein said memory can be referred to by an external processor.--
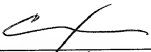
REMARKS

Entry of the above amendments prior to examination is respectfully requested.

Please charge any shortage in fees due in connection with the filing of this paper, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (500.33021CX5).

Respectfully submitted,

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